

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1-14 Cancelled

15. (New) A electrohydraulic brake system for motor vehicles of the 'brake-by-wire' type including a hydraulic pressure source that can be actuated by means of an electronic control unit and is comprised of a hydraulic pump driven by an electric motor and a high-pressure accumulator adapted to be recharged by the pump, wherein a means is provided monitoring the hydraulic delivery rate of the pump for the purpose of detection of quantities of gas or air at the suction side of the pump.

16. (New) The electrohydraulic brake system as claimed in claim 15, wherein the hydraulic delivery rate is monitored by determining the electromotive force of the electric motor driving the hydraulic pump.

17. (New) The electrohydraulic brake system as claimed in claim 15, wherein the hydraulic delivery rate is monitored by determining the electric power consumption of the electric motor driving the hydraulic pump.

18. (New) The electrohydraulic brake system as claimed in claim 15, wherein the hydraulic delivery rate is monitored by determining the rotational speed of the electric motor driving the hydraulic pump.

19. (New) The electrohydraulic brake system as claimed in claim 18, wherein the rotational speed is determined from the electromotive force of the electric motor driving the pump.

20. (New) The electrohydraulic brake system as claimed in claim 15, wherein the actuating frequency of the electric motor preferably amounts to 25 hertz.

21. (New) The electrohydraulic brake system as claimed in claim 15, wherein the time constant of the low-pass filter preferably amounts to 4 msec.

22. (New) A method of monitoring an electrohydraulic brake system for motor vehicles of the

'brake-by-wire' type including a hydraulic pressure source that can be actuated by means of an electronic control unit and is comprised of a hydraulic pump driven by an electric motor and a high-pressure accumulator adapted to be recharged by the pump, wherein quantities of gas or air at the suction side of the pump are detected by determining the hydraulic delivery rate of the pump.

23. (New) The method as claimed in claim 22, wherein the hydraulic delivery rate is determined by analyzing the electromotive force of the electric motor driving the pump.

24. (New) The method as claimed in claim 22, wherein the hydraulic delivery rate is determined by analyzing the electric power consumption of the electric motor driving the pump.

25. (New) The method as claimed in claim 22, wherein the hydraulic delivery rate is determined by analyzing the rotational speed of the electric motor driving the pump.

26. (New) The method as claimed in claim 22, wherein the rotational speed of the electric motor driving the pump is determined from the electromotive force of the electric motor.

27. (New) The method as claimed in claim 22 wherein the actuating frequency of the electric motor preferably amounts to 25 hertz.

28. (New) The method as claimed in claim 22, wherein the time constant of the low-pass filter preferably amounts to 4 msec.